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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/001,818      | 12/05/2001  | Su-Yueh Hsieh Hung   | 3380-0148P          | 2821             |

2292 7590 02/23/2006

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

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| EXAMINER |
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EDWARDS JR, TIMOTHY

|          |              |
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| ART UNIT | PAPER NUMBER |
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2635

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,818

Applicant(s)

HSIEH HUNG, SU-YUEH

Examiner

Timothy Edwards, Jr.

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claim 6 is withdrawn in view of Examiner's reconsideration of prior art of record Song USP 6,607,493. Rejections based on the previously cited reference(s) follow. Examiner interpreted claim 6 to read the radio set was in the fingertip unit. Amendment to claim 1 (incorporation of claim 6 into claim 1), indicates this is not the case (the radio set is not in the finger-tip unit).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song '493, and further in view of Besson et al '854.

Considering (amended) claim 1, Song discloses a heart beat analysis device and method comprising, a) an infrared heartbeat detector (see col 6, lines 64-67), the infrared heartbeat detector detecting a pulsation signal is not specifically recited by Song. However, one of ordinary skill in the art would readily recognize heart beat rate is measured by means of light by measuring the intensity light passing through the tissue of a person (i.e. fingertip or ear lobe). The intensity varies in pace with the heartbeat,

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which is due to the amount of blood in the tissue which varies because of the heartbeat. Besson teaches in col 24, line 47 to col 25, line 10 the use of infrared detection to detect a pulsation signal of the blood. Therefore, it would have been obvious to one of ordinary skill in the art to use an infrared detection means to detect a pulsation signal in the Song system as taught by Besson because Song expresses the desire to detect heart beat using photoelectric devices and both references are concerned with the detecting the heartbeat rate; b) a signal processing circuitry, the signal being converted and amplified into a processed signal by the processing circuitry (see Song fig 3, items 33, 34, and 35); c) a radio frequency wireless signal transmission circuitry, the processed signal being transmitted by the radio frequency wireless signal transmission circuitry (see col 6, lines 52-63); d) wireless receiving circuitry, the processed signal being received by a wireless receiving circuitry via a radio frequency and being converted into a heart beat rate (see col 4, lines 8-18); e) wireless receiving circuitry comprising a radio receiving set (see col 2, lines 1-4); f) a display for displaying the heartbeat rate (see col 5, lines 1-5); g) transmission circuitry worn on the wrist of a user (see col 3, lines 29-33); h) Song does not specifically recite the infrared heartbeat detector, the signal processing circuitry and the radio frequency wireless signal transmission circuitry are placed only on the finger of the user. Besson teaches the limitation of this claim (see col 20, lines 52-59 and fig 4a). Obviousness is as cited in part (a) above.

Considering claim 2, Song does not specifically recite the infrared heartbeat detector is at least one of a reflection and a penetration infrared detector. However, one of ordinary

skill in the art would readily recognize heart beat rate is measured by means of light by measuring the intensity light passing through the tissue of a person (i.e. fingertip or ear lobe). The intensity varies in pace with the heartbeat, which is due to the amount of blood in the tissue which varies because of the heartbeat. Besson teaches in col 24, line 67 to col 25, line 4 the use of infrared detection to detect a pulsation signal of the blood by reflection measurement (also see fig 4a). Obviousness is as cited in claim 1, part (a).

Considering claim 3, Song discloses the limitations of these claims see col 3, lines 11-16.

### ***Conclusion***

3. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached at (571) 272-3068.

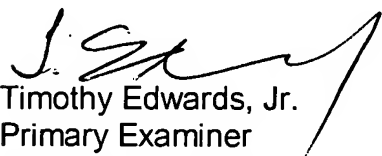
Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'T. Edwards, Jr.', with a long, sweeping horizontal stroke extending to the right.

Timothy Edwards, Jr.  
Primary Examiner  
February 18, 2006